PATENT COOPERATION TREATY

	From the INTERNATIONAL BUREAU
PCT	То:
NOTIFICATION OF ELECTION (PCT Rule 61.2)	Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT Washington, D.C.20231 ÉTATS-UNIS D'AMÉRIQUE
Date of mailing: 28 October 1999 (28.10.99)	in its capacity as elected Office
International application No.: PCT/JP99/02121	Applicant's or agent's file reference: 99-017-PCT
International filing date: 21 April 1999 (21.04.99)	Priority date: 23 April 1998 (23.04.98)
Applicant: ASADA, Kiyozo et al	
1. The designated Office is hereby notified of its election made in the demand filed with the International preliminary 13 September in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effecting later election filed with the International preliminary in a notice effection filed with the International preliminary in a notice effection filed with the International preliminary in a notice effection filed with the International preliminary in a notice effection filed with the International preliminary in a notice effection	y Examining Authority on: 1999 (13.09.99) national Bureau on: date or, where Rule 32 applies, within the time limit under
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer: J. Zahra
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38



E P



PCT 国際調査報告

(法8条、法施行規則第40、41条) [PCT18条、PCT規則43、44]

出願人又は代理人 の書類記号 99-017-PCT	今後の手続きについては、		の送付通知様式(と参照すること。・	PCT/ISA/220)
国際出願番号 PCT/JP99/02121	国際出願日 (日.月.年) 21.0	4.99	優先日 (日.月.年)	23.04.98
出願人 (氏名又は名称) 資流	西造株式会社			
·				
国際調査機関が作成したこの国際調 この写しは国際事務局にも送付され		(PCT18\$	を) の規定に従い出	出願人に送付する。
この国際調査報告は、全部で3	ページである。			:
この調査報告に引用された先行	技術文献の写しも添付される	ている。		
	れた国際出願の翻訳文に基	づき国際調査	を行った。	
b. この国際出願は、ヌクレオチ この国際出願に含まれる書		でおり、次の酢	己列表に基づき国際	器調査を行った。
X この国際出願と共に提出さ	れたフレキシブルディスク	による配列表		
□ 出願後に、この国際調査機	と関に提出された書面による	配列表		
<u> </u>	と関に提出されたフレキシブ		よる配列表	
	る配列表が出願時における			事項を含まない旨の陳述
X 書面による配列表に記載し 書の提出があった。	た配列とフレキシブルディ	スクによる配	列表に記録した配	列が同一である旨の陳述
2. 請求の範囲の一部の調査	ができない(第 I 欄参照)。	•		
3. 発明の単一性が欠如して	いる(第II欄参照)。			
4. 発明の名称は 🗵 出	頼人が提出したものを承認-	する。		
. 口 次	に示すように国際調査機関	が作成した。		
_				
5. 要約は 🗓 出	願人が提出したものを承認:	する。		
国	Ⅲ欄に示されているように 際調査機関が作成した。出 国際調査機関に意見を提出	願人は、この[国際調査報告の発達	∭38.2(b)) の規定により 送の日からⅠカ月以内にこ
6. 要約費とともに公表される図は 第図とする。	、 願人が示したとおりである。	•	X なし	
	願人は図を示さなかった。			
*	図は発明の特徴を一層よく	表している。	•	



A	発明の属する分野の分類	(国際特許分類(ΙF	c))
Α.	免別の腐りるガ野のガ策	(国际やログを)		\circ	,

Int. Cl° C12N15/10, C12Q1/68

B. 調査を行った分野

調査を行った最小限資料(国際特許分類(IPC))

Int. C1° C12N15/10, C12Q1/68

最小限資料以外の資料で調査を行った分野に含まれるもの

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

BIOSIS (DIALOG), WPI (DIALOG)

C. 関連する 引用文献の カテゴリー*	5と認められる文献 引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	Tigst, D. et al. "The Effects of Plant Polysaccarides and Buffer Additives on PCR" BioTechniques (1992) 第12巻 第3号 p. 332-	1-34
A	Suzanne C. et al. "Effective amplification of long targets from cloned inserts and human genomic DNA" Proc. Natl. Acad. Sci. USA (1994) 第91巻 第12号 p. 5695-5699	1-34
A	JP, 6-277062, A (エフ. ホフマンーラ ロシュ アクチェン ケ`セ`ルシャフト) 4.10月.1994(04.10.94)& EP, 590327, A2 & CA, 2105944, A & US, 5501963, A	1-34

X C欄の続きにも文献が列挙されている。

□ パテントファミリーに関する別紙を参照。

- * 引用文献のカテゴリー
- 「A」特に関連のある文献ではなく、一般的技術水準を示す もの
- 「E」国際出願日前の出願または特許であるが、国際出願日 以後に公表されたもの
- 「L」優先権主張に疑義を提起する文献又は他の文献の発行 日若しくは他の特別な理由を確立するために引用する 文献(理由を付す)
- 「〇」ロ頭による開示、使用、展示等に言及する文献

郵便番号100-8915

東京都千代田区霞が関三丁目4番3号

「P」国際出願日前で、かつ優先権の主張の基礎となる出願

- の日の後に公表された文献
- 「T」国際出願日又は優先日後に公表された文献であって て出願と矛盾するものではなく、発明の原理又は理 論の理解のために引用するもの
- 「X」特に関連のある文献であって、当該文献のみで発明 の新規性又は進歩性がないと考えられるもの
- 「Y」特に関連のある文献であって、当該文献と他の1以 上の文献との、当業者にとって自明である組合せに よって進歩性がないと考えられるもの

電話番号 03-3581-1101 内線 3488

「&」同一パテントファミリー文献

国際調査を完了した日 07.07.99 国際調査報告の発送日 21.07.99 国際調査機関の名称及びあて先 日本国特許庁(ISA/JP) 特許庁審査官(権限のある職員) 4N 9549 引地 進

様式PCT/ISA/210 (第2ページ) (1998年7月)



国際出願番号 PCT/JP99/02121

C(続き).	関連すると認められる文献	
・引用文献の		関連する 請求の範囲の番号
カテゴリー* A	Roman, J. et al. "Reversal of RT-PCR Inhibition Observed in Hep arinized Clinical Specimens" BioTechniques (1997) 第23巻 第1号 p. 24-28	1-34
A	Gunnar, T. et al. "Optimization of PCR to Yield Successful Amplification From Heparin-Contaminated DNA" Methods Mol. Cel. Bio 1. (1995) 第5巻 第2号 p. 122-124	1-34
		,
·		
		-
·		

特許手能上の微生物の寄託の国際的承認 に関するプケペスト条約

下記国際衛託当局によって規則 7. 1に従い 発行される。

原寄託についての受託証

BUDAPEST TREAT HE INTERNATIO-NAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT

issued pursuant to Rule 7, 1 by the INTERNATIONAL DEPOSITARY AUTHORITY identified at the bottom of this Dage.

氏名 (名称)

宝酒造株式会社

代表取締役

大宮 久

资託省

あて名 6 1 2

京都市伏見区竹中町609番地

殿

一般生物の表示

(寄託者が付した識別のための表示)

Escherichia coli JM109/pFU1001

(受託電号) FERM BP- 5579

2. 科学的性質及び分類学上の位置

1 間の設生物には、次の事項を記載した文書が添付されていた。

国 科学的性質

■ 分類学上の位置

3. 受領及び受託

本国際寄託当局は、 平成 7 年 8 月 11 日 (原寄託日) に受領した1棚の散生物を受託する。

4. 移管請求の受領

李国際各託当局は、 平成 7 年 8 月 11 日 (原衛託日) に1 棚の飲生物を受領した。 そして、平成 S'年 7月12日に原寄託よりプグペスト条約に悲づく寄託への移管請求を受領した。 (平成 7 年 8 月 11 日 に奇託された数工研萄券第P- 15108

5. 国際衛託当局

通商産業省工業技術院生命工学工業技術研究所

名 称:

National Institute of Bioscience and Human-Technology
Agency of Jodustrial Science and Technology

所 長 大石 道夫 医结肠管 神经的

Michib-OfstipPSQ., DIRECTOR GENERAL.

あて名: 日 本 国 茨 城門に売り 三冠 市 東 1 丁 目 1 岩 3 号 (郵便番号305) 1-3, Higashi 1 chome Tsukuba-shi Ibaraki-ken

- 305, JAPAN

平成 8年(1996) 7月12日



INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP99/02121

	FICATION OF SUBJECT MATTER C1 C12N15/10, C12Q1/68		
According to	o International Patent Classification (IPC) or to both na	tional classification and IPC	
B. FIELDS	SEARCHED		
	ocumentation searched (classification system followed C1 ⁶ C12N15/10, C12Q1/68	by classification symbols)	
Documentat /	ion searched other than minimum documentation to the	e extent that such documents are included	l in the fields searched
	ata base consulted during the international search (name is (DIALOG), WPI (DIALOG)	ne of data base and, where practicable, se	arch terms used)
C. DOCU	MENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.
A	Tigst, D. et al., "The Effects of and Buffer Additives on PCR" Vol. 12, No. 3 p.332-334		1-34
A	Suzanne C. et al., "Effective tragets from cloned inserts a Proc. Natl. Acad. Sci. USA (p.5695-5699	and human genomic DNA"	1-34
A	JP, 6-277062, A (F.Hoffmann-4 October, 1994 (04. 10. 94) & EP, 590327, A2 & CA, 2108 & US, 5501963, A		1-34
A	Roman, J. et al., "Reversal observed in Heparinized Clin BioTechniques (1997) Vol. 23	ical Specimens"	1-34
	or downments are listed in the sensitive to CD C	San natant families	
	er documents are listed in the continuation of Box C.	See patent family annex.	
"A" docum conside "E" carlier "L" docum cited to special "O" docum meuns "P" docum the prior	ent published prior to the international filing date but later than ority date claimed	"T" later document published after the interdate and not in conflict with the application the principle or theory underlying the indocument of particular relevance; the classifier document of cannot be considered when the document is taken alone document of particular relevance; the classifier document of particular relevance; the classifier document of particular relevance; the classifier document of involve an inventive step considered to involve an inventive step combined with one or more other such a being obvious to a person skilled in the document member of the same patent far	tion but cited to understand vention aimed invention cannot be id to involve an inventive step aimed invention cannot be when the document is documents, such combination art
7 Ju	actual completion of the international search aly, 1999 (07. 07. 99)	Date of mailing of the international sea 21 July, 1999 (21.	
	mailing address of the ISA/ anese Patent Office	Authorized officer	
Facsimile N	√o.	Telephone No.	



INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP99/02121

ategory*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	Gunnar, T. et al., "Optimization of PCR to Yield Successful Amplification From Heparin-Contaminated DNA" Methods Mol. Cel. Biol. (1995) Vol. 5, No. 2 p.122-124	1-34

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 0050/049079	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)			
International application No.	International filing date (day/m			
PCT/EP99/03196	10 May 1999 (10.05	5.99) 28 May 1998 (28.05.98)		
International Patent Classification (IPC) or na C12N 15/52, 15/80, 1/15, C12P 2				
Applicant	BASF AKTIENGESELL	SCHAFT		
This international preliminary example Authority and is transmitted to the appropriate to the appropria		ared by this International Preliminary Examining		
2. This REPORT consists of a total of 5 sheets, including this cover sheet.				
been amended and are the ba		of the description, claims and/or drawings which have containing rectifications made before this Authority actions under the PCT).		
These annexes consist of a to	otal of sheets.			
3. This report contains indications relat	ing to the following items:			
I Basis of the report				
II Priority				
III Non-establishment	of opinion with regard to novel	ty, inventive step and industrial applicability		
IV Lack of unity of in	vention	,		
V Reasoned statemen citations and explan	t under Article 35(2) with regard nations supporting such statemen	d to novelty, inventive step or industrial applicability; nt		
VI Certain documents	cited			
VII Certain defects in t	he international application			
VIII Certain observation	ns on the international applicatio	n		
Date of submission of the demand	Date of	completion of this report		
17 December 1999 (17.)	12.99)	02 August 2000 (02.08.2000)		
Name and mailing address of the IPEA/EP	Authori	zed officer		
Facsimile No.	Telepho	one No.		



International application No.

PCT/EP99/03196

I. Basis of t	the report		
			ment sheets which have been furnished to the receiving Office in response to an invitation ally filed" and are not annexed to the report since they do not contain amendments.):
\boxtimes	the international	application as original	ily filed.
\boxtimes	the description,	pages1-20	, as originally filed,
	-	pages	, filed with the demand,
		pages	, filed with the letter of,
		pages	, filed with the letter of
	the claims,	Nos1-17	, as originally filed,
کا	J		, as amended under Article 19,
			, filed with the demand,
		Nos	, filed with the letter of,
		Nos	, filed with the letter of
	the drawings,	sheets/fig1/4-	4/4 , as originally filed,
	•	sheets/fig	, filed with the demand,
		sheets/fig	, filed with the letter of,
		sheets/fig	, filed with the letter of
2. The amer	ndments have resulte	ed in the cancellation o	of:
	the description,	pages	
	the claims,	Nos	
	the drawings,	sheets/fig	
_	J J ,		
3. Thi	is report has been es	stablished as if (some o	of) the amendments had not been made, since they have been considered ated in the Supplemental Box (Rule 70.2(c)).
to y	go beyond the discic	sure as med, as mulca	ned in the Supplemental Box (Rule 70.2(c)).
4. Additiona	al observations, if ne	cessary:	

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box IV.3

1. Reference is made to the following documents:

D2: EP-A-0 405 370
D3: DE-A-44 20 785
D4: EP-A-0 821 063
D5: EP-A-0 569 806

D6: WO-A-93/04180

D7: BROWN D H JR et al.: MOLECULAR AND GENERAL GENETICS (1996), 251 (1) 75-80

- The application fails to meet the requirement of unity of invention (PCT Rule 13) because the claims are directed to two different inventions, namely:
 - (1) Claims 1-16 (method for increasing production of riboflavin by increasing the activity of the DBP synthase, DMRL synthase and riboflavin synthase enzymes in an organism);
 - (2) Claim 17 (method for integrating nucleic acids in the genomes of organisms, involving the insertion of at least one riboflavin synthesis gene into the genome of the organism by Restriction Enzyme Mediated Integration).

The two inventions are not based on a single general inventive concept because they are not linked by a "special technical feature" within the meaning of PCT Rule 13.2. The only feature that inventions (1) and (2) have in common is the fact that they both relate to the synthesis of riboflavin. However, this common feature is well known from the prior art and is therefore not novel (a posteriori lack of unity). Document D2, for example, describes the insertion of the riboflavin synthesis gene into Bacillus. Document D3 discloses the transformation of host organisms

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box IV.3

using DNA sequences from Ashbya gossypii that code for the riboflavin synthesis enzymes. The transformation of microorganisms using an expression vector containing the riboflavin synthesis gene from S. cerevisiae is disclosed in document D5.

Hence the two claimed inventions are not so linked as to form a single general inventive concept (PCT Rule 13.1).

nternational application No.
PCT/EP 99/03196

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement 1. Statement YES 16-17 Novelty (N) Claims 1-15 Claims NO YES Inventive step (IS) Claims 16-17 Claims NO 1 - 17Claims YES Industrial applicability (IA) NO Claims

2. Citations and explanations

 The application fails to meet the requirement of PCT Article 33(2) because the subject matter of Claims 1-15 is not novel.

Document D2 discloses the over-production of riboflavin in Bacillus subtilis. This is achieved using standard gene technology methods and also, in particular, the insertion into Bacillus subtilis of several copies of a 10 kb fragment containing the entire riboflavin operon. This results in high-level constitutive production of the biosynthetic enzymes and allows riboflavin production in excess of 5 g/l. Document D2 is therefore prejudicial to the novelty of Claims 1-15. In a similar way, document D4 is also prejudicial to the novelty of Claims 1-15.

Moreover, Claim 14 lacks novelty over any riboflavinproducing organism in which the said genes occur naturally, such as the fungus *Ashbya gossypii* known from document D3.

In Claim 7, the reference to a 35% "homology" with no indication of a reference sequence is unclear and cannot establish novelty (see also Box VIII below).

Claims 16 and 17 are not considered inventive for the following reasons:

The use of the genes that code for the enzymes which participate in riboflavin synthesis to increase the production of riboflavin is generally known from the prior art (see, for example, D2). It would therefore be obvious to a person skilled in the art to use this method to increase riboflavin production in the known riboflavin producer Ashbya gossypii (see D3). Claim 16 therefore lacks an inventive step.

The use of the REMI technique for inserting desired genes into fungi is generally known (see document D7). The only difference between the method according to Claim 17 and that described in D7 is that Claim 17 specifies that at least one riboflavin synthesis gene is used as the desired gene. However, it would be clear to a person skilled in the art on the basis of D7 that the method therein described can in principle be used for any desired genes, irrespective of the function of their gene product. The purely arbitrary choice of particular genes from the full set of possible genes cannot be considered inventive.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. The application fails to meet the requirements of PCT Article 6 because Claims 1, 6, 7 and 11 are not clear.

The terms "functional analogues" and "functional equivalents" in Claims 1, 6 and 11 are unclear and leave the reader in doubt as to the meaning of the technical features referred to. The subject matter of these claims is therefore not clearly defined (PCT Article 6). As a matter of principle, terms which are unclear cannot be used to delimit the claimed subject matter over the prior art.

The term "homology" in Claim 7 is unclear. The meaning would appear to be "amino acid identity". It is also unclear what sequences the equivalents are supposed to be homologous to.

2. The invention according to Claim 1 is insufficiently disclosed (PCT Article 5) inasmuch as it relates to the increasing of the activity of the enzymes specified in Claim 1 by increasing the specific activity of these enzymes (see the description, page 8). An inventive step would be required to determine how the enzymes would have to be modified in order to increase their specific activity. Sufficient disclosure could only be acknowledged for a method in which the **synthesis** of the stated enzymes is increased.

Translation



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

	1		
Applicant's or agent's file reference 99-017-PCT	FOR FURTHER ACTIO		tionofTransmittalofInternational Preliminary n Report (Form PCT/IPEA/416)
International application No.	International filing date (da	y/month/year)	Priority date (day/month/year)
PCT/JP99/02121	21 April 1999 (2		23 April 1998 (23.04.98)
International Patent Classification (IPC) or n C12N 15/10, C12Q 1/68	national classification and IP		
Applicant	TAKARA SHUZO	CO., LTD.	
and is transmitted to the applicant ac 2. This REPORT consists of a total of This report is also accompan	sheets, included by ANNEXES, i.e., sheets for this report and/or sheets of the Administrative Instruction	ding this cover sets of the descress containing recions under the Periods	iption, claims and/or drawings which have stifications made before this Authority (see
This report contains indications relat	ting to the following items:		
Daris state and	ting to the tollowing items.		
Basis of the report			•
II Priority	•		
III Non-establishment o	of opinion with regard to nov	elty, inventive sto	ep and industrial applicability
IV Lack of unity of inve	ention		
V Reasoned statement citations and explana	under Article 35(2) with regations supporting such staten	rd to novelty, in ent	ventive step or industrial applicability;
VI Certain documents c	ited		
VII Certain defects in the	e international application		
	on the international applicat	on	
<u>—</u>			
De Calada da			
Date of submission of the demand	Date	of completion o	f this report
13 September 1999 (13.0	09.99)	06	June 2000 (06.06.2000)
Name and mailing address of the IPEA/JP	Auth	orized officer	
Facsimile No.	Tele	phone No.	

PCT/JP99/02121

I. I	Basis	of the re	eport
1.	With	regard to	the elements of the international application:*
	\boxtimes	the inte	ernational application as originally filed
		the des	cription:
		pages	, as originally filed
		pages	, filed with the demand
		pages	, filed with the letter of
lı		the clai	ms:
Ι΄		pages	, as originally filed
		pages	, as amended (together with any statement under Article 19
ĺ		pages	, filed with the demand
		pages	, filed with the letter of
		the drav	wings:
•		pages	, as originally filed
		pages	, filed with the demand
		pages	, filed with the letter of
١٢	٦,	he seaue	nce listing part of the description:
	_	pages	, as originally filed
		pages	, as originally filed with the demand
		pages	, filed with the letter of
t	he in	ternation e element the lang the lang	the language, all the elements marked above were available or furnished to this Authority in the language in which had application was filed, unless otherwise indicated under this item. It is were available or furnished to this Authority in the following language which is: It is were available or furnished for the purposes of international search (under Rule 23.1(b)). It is guage of publication of the international application (under Rule 48.3(b)). It is guage of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/).
3. '	With orelin	ninary ex	to any nucleotide and/or amino acid sequence disclosed in the international application, the international amination was carried out on the basis of the sequence listing:
ľ	$\stackrel{\triangle}{\Box}$		ed in the international application in written form. gether with the international application in computer readable form.
ř			ed subsequently to this Authority in written form.
Ĭ	Ħ.		ed subsequently to this Authority in computer readable form.
Ĭ	Ħ		stement that the subsequently furnished written sequence listing does not go beyond the disclosure in the
	_	internat	ional application as filed has been furnished.
	\boxtimes	The sta	tement that the information recorded in computer readable form is identical to the written sequence listing has mished.
4. [The ame	endments have resulted in the cancellation of:
			he description, pages
			he claims, Nos
	i	1 1	he drawings, sheets/fig
5. [□ ;	This repo	ort has been established as if (some of) the amendments had not been made, since they have been considered to go he disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
ın	this	cement sl report).17).	neets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16
** A	ny re	placeme	nt sheet containing such amendments must be referred to under item 1 and annexed to this report.

nternational application No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP99/02121

atement			
Novelty (N)	Claims	1-34	Y
	Claims		N
Inventive step (IS)	Claims	1-34	Y
	Claims		N
Industrial applicability (IA)	Claims	1-34	Y
	Claims		NO
itations and explanations	- 	-	

出願人又は代理人

今後の手続きについては、国際予備審査報告の送付通知(様式PCT/

PCT

国際予備審査報告

(法第12条、法施行規則第56条) [PCT36条及びPCT規則70]

MIPO POT

の書類記号 99-017-PCT	IPEA/416)を参照すること。			
国際出願番号 PCT/JP99/02121	国際出願日 (日.月.年) 21.04.99 優 先日 (日.月.年) 23.04.98			
国際特許分類 (IPC) Int. Cl' C12N15/10, (C12Q1/68			
出願人(氏名又は名称) ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	会社			
1. 国際予備審査機関が作成したこの国	際予備審査報告を法施行規則第57条(PCT36条)の規定に従い送付する。			
2. この国際予備審査報告は、この表紙	そを含めて全部で ページからなる。			
この国際予備審査報告には、附属書類、つまり補正されて、この報告の基礎とされた及び/又はこの国際予備審査機関に対してした訂正を含む明細書、請求の範囲及び/又は図面も添付されている。 (PCT規則70.16及びPCT実施細則第607号参照) この附属書類は、全部で ページである。				
3. この国際予備審査報告は、次の内容	!を含む。			
I X 国際予備審査報告の基礎				
Ⅱ □ 優先権				
Ⅲ	Ⅲ			
IV 第明の単一性の欠如	IV			
V X PCT35条(2)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明 VI ある種の引用文献				
VII 国際出願の不備				
VII 国際出願に対する意見				
国際予備審査の請求書を受理した日 13.09.99	国際予備審査報告を作成した日の日の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の			
名称及びあて先 日本国特許庁(IPEA/JP) 郵便番号100-8915 東京都千代田区霞が関三丁目4番	特許庁審査官 (権限のある職員) 4N 9549 引地 進 電話番号 03-3581-1101 内線 3488			

1.	[国際予備審査報	8告の基礎			
1.	ŗ		提出された			れた。 (法第6条 (PCT14条) の規定に基づく命令に おいて「出願時」とし、本報告書には添付しない。
	X	出願時の国際	於出願書類			
		明細書 明細書 明細書	第 第 第		_ ページ、 _ ページ、 _ ページ、	出願時に提出されたもの 国際予備審査の請求書と共に提出されたもの 付の書簡と共に提出されたもの
		請求の範囲 請求の範囲 請求の範囲	第 第		項、 項、 	出願時に提出されたもの PCT19条の規定に基づき補正されたもの 国際予備審査の請求書と共に提出されたもの
		請求の範囲	第		^{按、} ^{項、}	一
		図面 図面 図面	第 第 第 		ページ/図 ページ/図 ページ/図 _	、出願時に提出されたもの 国際予備審査の請求書と共に提出されたもの 付の書簡と共に提出されたもの
		明細書の配列 明細書の配列 明細書の配列	リ表の部分 第	养	ページ、 ページ、 ページ、	出願時に提出されたもの 国際予備審査の請求書と共に提出されたもの 付の書簡と共に提出されたもの
2.	_	上記の出願書類	質の言語は、	下記に示す場合を	と除くほか、こ	の国際出願の言語である。
	-	上記の書類は、	下記の言語	である	語であ	oる。
	[PCT規	則48.3(b)に	出されたPCT規 いう国際公開の言 こ提出されたPC	語	・う翻訳文の言語 たは55.3にいう翻訳文の言語
3.	;	この国際出願に	は、ヌクレオ	チド又はアミノ酢	飽配列を含んて	おり、次の配列表に基づき国際予備審査報告を行った。
] 	この国際に出願後に出願後に出願の提出。	出願と共に抗 、この国際 、この国際 提出した 客 があった	予備審査(または 面による配列表が	シブルディス 調査)機関に 調査)機関に 出願時におけ	クによる配列表 提出された書面による配列表 提出されたフレキシブルディスクによる配列表 る国際出願の開示の範囲を超える事項を含まない旨の陳述 ィスクによる配列表に記録した配列が同一である旨の陳述
4.		甫正により、T 明細 書	第			
		請求の範囲 図面	第 図面の第 _			-ジ/図
5.		れるので、そ	この補正がさ	れなかったものと	して作成した	Eが出願時における開示の範囲を越えてされたものと認めら 。(PCT規則70.2(c) この補正を含む差し替え用紙は上 な告に添付する。)

国際予備審査報告

国際出願番号 PCT/JP99/02121

見解			
新規性(N)	請求の範囲	1 – 3 4	
	請求の範囲		<u></u>
進歩性(IS)	請求の範囲	1 – 3 4	
	明小マン単位四		
産業上の利用可能性(IA)	請求の範囲 請求の範囲	1 – 3 4	
文献及び説明(PCT規則70.7)			
請求の範囲1-34に記載る 記載されておらず、当業者に	された発明は、国際調査	: 報告で引用された何A	この文献に
記載されておらず、当業者に	ことって自明なものでも	ない。	



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3	SEQLIST	6

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3	SEQLIST	6

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Remarks:

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